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National Priority Chemicals Trends Report (2000-2004)

Section 4 Chemical Specific Trends Analyses for Priority Chemicals (2000–2004): Lindane

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Lindane

Chemical Information:

CAS Number – 58–89–9

Alternate Names – Hexachlorocyclohexane, gamma–

General Uses – Lindane was mainly used on fruit and vegetable crops to kill insects. It also was used as an ingredient in ointments that help cure head lice, body lice, and scabies. It has not been made in the United States since 1977, but it may still be imported into the country and formulated. Only individuals who are certified may use this chemical.

Potential Hazards – Lindane is highly toxic; it may be fatal if inhaled, swallowed or absorbed through the skin.

Summary Analysis:

- **NATIONAL:** No lindane was reported in 2004.
- **REGIONAL:** From 2000 to 2003, lindane was reported by two facilities – one each in EPA Regions 8 and 10. Only the facility in Region 10 (Idaho) reported lindane in multiple years.
- **FACILITY:** The largest quantity (183 pounds) of lindane was reported in 2002, when the two facilities mentioned above, reported this chemical; both facilities used lindane as a feed treatment. Except in 2002, only one facility reported lindane in 2000–2001 and in 2003. That facility indicated that it planned to eliminate the future use of lindane. As such, it now appears lindane will no longer be reported.
- **MANAGEMENT:** Treatment was the primary method used to manage lindane in 2000–2003.
- **INDUSTRY SECTOR:** Both facilities that reported lindane were in SIC 2879 (Pesticides and agricultural chemicals, nec).

National Trends:

Exhibit 4.144 shows the number of facilities that reported lindane in 2000 to 2004 and the quantities that were managed via disposal, treatment, energy recovery, and recycling. In 2004, no lindane was reported. Since 2000, no more than two facilities reported lindane in a given year. The largest quantity of lindane was reported in 2002 when two facilities reported this chemical. Except in 2002, only one and the same facility reported lindane in 2000–2001 and in 2003. The facility that had reported lindane in 2000–2003 indicated it was eliminating the future use of lindane as a feed treatment. As such, it now appears lindane will no longer be reported. Treatment was the primary method used to manage lindane; some lindane was land disposed in 2000 and 2001. The one facility that reported lindane in 2000–2003 also recycled a significant quantity of this chemical in each reporting year.

Exhibit 4.144. National Management Methods for Lindane, 2000–2004

Management Methods for Lindane and Number of Facilities	2000	2001	2002	2003	2004	Percent Change (2000–2004)	Management Method -- Percent of Total Quantity of This PC (2004)
Number of Facilities	1	1	2	1	0	–100.0%	-
Disposal Quantity (pounds)	17	16	0	0	0	–100.0%	NA
Energy Recovery Quantity (pounds)	0	0	0	0	0	NA	NA
Total Treatment Quantity (pounds)	47	30	183	71	0	–100.0%	NA
Total PC Quantity (pounds)	64	46	183	71	0	–100.0%	-
Total Recycled (pounds)*	215	188	163	179	0	–100.0%	-

*Note: Waste minimization is the emphasis of this Report. As such, we primarily focus on quantities of PCs that are managed via onsite/offsite disposal, treatment, or energy recovery because we believe these PC quantities offer the greatest opportunities for waste minimization. Because recycled quantities of PCs are already directed to their best uses, they are considered separate and distinct from the quantities of PCs not recycled. Throughout this section, the recycled quantity is presented to provide some perspective regarding the quantity of this PC already recycled compared to the quantities that are managed via disposal, treatment, and energy recovery and thus potentially available for waste minimization.

EPA Regional Trends:

Exhibit 4.145 shows the quantity of lindane reported by two facilities – one each in EPA Regions 8 and 10, from 2000 to 2004. In 2004, no facilities reported lindane. The facility in Region 8 only reported lindane in 2002.

Exhibit 4.145. Regional Quantity of Lindane Reported, 2000–2004

EPA Region	2000 (pounds)	2001 (pounds)	2002 (pounds)	2003 (pounds)	2004 (pounds)	Percent Change in Quantity (2000–2004)	Percent of Total Quantity of This PC (2004)
8	0	0	86	0	0	NA	NA
10	64	46	97	71	0	–100.0%	NA
Total	64	46	183	71	0	–100.0%	NA

State Trends:

Since 2000, only two facilities reported lindane — one facility each in Idaho and North Dakota (Exhibit 4.146). The facility in North Dakota only reported lindane in 2002; the facility in Idaho reported lindane each year from 2000 to 2003. No facility reported lindane in 2004.

Exhibit 4.146. State Quantity Trends for Lindane, Based on Largest Quantity in 2003, 2000–2004

State	2000 (pounds)	2001 (pounds)	2002 (pounds)	2003 (pounds)	2004 (pounds)	Percent of Total Quantity of This PC (2004)
ID	64	46	97	71	0	NA
ND	0	0	86	0	0	NA
Total	64	46	183	71	0	NA

Industry Sector (SIC) Trends:

Only two facilities, both in SIC 2879 (Pesticides and agricultural chemicals, nec) reported lindane in 2000–2003 (Exhibit 4.147). Each of these facilities used lindane as a feed treatment. The facility that had reported lindane each year from 2000 to 2003 indicated it planned to eliminate use of lindane. As such, no lindane is expected to be reported after 2003.

Exhibit 4.147. Industry Sectors Containing Lindane, 2000–2004

Primary SIC	SIC Code Description	2000 (pounds)	2001 (pounds)	2002 (pounds)	2003 (pounds)	2004 (pounds)
2879	Pesticides and agricultural chemicals, nec	64	46	183	71	0